REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

Claim Rejections-35 U.S.C. § 103(a)

The Office Action rejected claims 1-5, 9, 10 and 12-20 under 35 U.S.C. 103(a) as being unpatentable over Applicant's commonly owned issued patent (Dallas) in view of Dearing et al. Applicant respectfully disagrees.

With respect to claim 1, the Office Action states that "It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dallas to include at least a third coil gripping surface adapted to grip a third diameter as taught by Dearing in order to reduce the run time."

However, Dearing does not teach a "third coil gripping surface of a third diameter." Dearing only teaches coil gripping surfaces 142, 144 of a first and second diameters (see FIG. 11, and paragraph [0042]). There is no teaching or suggestion of a "third coil gripping surface of a third diameter" anywhere in Dearing.

In the Response to Arguments, the Office Action notes that "the claims do not call for a third gripping surface of a third diameter." Applicant agrees that although there was implicit recitation of the third gripping surface of the third diameter, there was no explicit recitation of same. Claim 1 is therefore amended to explicitly recite "concave coil tubing gripping surfaces of respective first, second and third different sizes, the at least first, second and third concave coil tubing gripping surfaces being respectively adapted to simultaneously grip a said coil tubing string of a respective first, second and third diameter."

The Response to Arguments further states that "Applicant does not claim a live well." Claim 1 is therefore amended to claim "injecting a plurality of coil tubing strings of different diameters through the lubricator assembly or the stuffing box against well pressure into the subterranean well."

The Response to Arguments yet further asserts that "The Dearing reference is being used merely to show that it would have been obvious to modify the gripper chain drive system of Dallas to include a third coil griping surface, in order to reduce running time." With respect, that argument is not supported. Dearing et al. only teaches one injector system 22, with a single

injector wheel having up to four grooves, two (142) of a first diameter and two (144) of a second diameter. Applicant respectfully submits that it could not be obvious to modify Dallas to add a third gripper chain drive system for injecting a tubing string of a third diameter, which is taught neither by Dallas nor Dearing et al.

Dearing states that "running time is reduced by half in the case of two strings, two-thirds in the case of three strings, three quarters in the case of four strings, and the like" (paragraph [0030], lines 4-7). However, this is simply unsupported speculation based on mathematical extrapolation. Any person skilled in the art understands that the apparatus taught by Dearing et al. cannot, under any circumstances, be used to inject even two coil tubing strings of different diameter at the same time, because the chain assembly 146 can only apply breaking pressure to two coil tubing strings of exactly the same diameter at one time. This is an inherent feature of the wheel 114 and the chain assembly 146. Any person of ordinary skill in the art would understand this after a casual inspection of Dearing et al. Consequently, if the apparatus of Dearing et al. could be adapted to run more than two coil tubing strings, each of those coil tubing strings would have to be of exactly the same diameter. It is therefore respectfully submitted that paragraph [0030] of Dearing must be interpreted as follows: "running time is reduced by half in the case of two strings [of the same diameter], two-thirds in the case of three strings [of the same diameter], three quarters in the case of four strings [of the same diameter], and the like". Read in the context of its teaching, Dearing et al. fails to make it obvious to modify the gripper chain drive system of Dallas to include a third coil gripping surface (of a third size), in order to reduce running time, or for any other reason.

Claim 3 is cancelled and the subject matter thereof incorporated in amended claim 1. Claims 4 and 5 are amended to accord with the limitations of amended claim 1.

In view of the amendment of claims 1, 4 and 5, the cancellation of claim 3 with the incorporation of the subject matter of claim 3 into claim 1, and for reasons set forth above in detail, the rejection of claims 1-5 and 14-18 is respectfully traversed.

With respect to claim 9, the Office Action again asserts that "Dearing et al. teaches that it is advantageous to run two or more spooled tubing strings into a well in order to reduce running time. It would have been obvious to make at least three independently drivable gripper chain drive systems in order to reduce running time."

Claim 9 is likewise amended to incorporate the additional limitations introduced into amended claim 1. For reasons set forth above in detail with reference to amended claim 1, Applicant respectfully submits that it is not obvious to modify Dallas in view of Dearing et al. to arrive at the coil tubing injector claimed in amended claim 9. Claims 10, 12 and 13 are amended to accord with amended claim 9. The rejection of claims 9, 10 and 12-13 is thereby traversed.

With respect to claim 19, the Office Action asserts "Dearing et al. teaches three differently–sized gripping surfaces in order to reduce running time (see page 3 paragraph [0042]). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Dallas by including three differently-sized coil tubing strings as taught by Dearing et al. in order to insert tubing strings of different sizes into the well and reduce running time."

With respect, as explained above, Dearing et al. fails to teach or suggest three differently-sized gripping surfaces for any purpose, let alone to reduce running time. Paragraph [0042] teaches: "As shown in FIGS. 8 and 11, the wheel 114 preferably includes first and second grooves 142 of a predetermined size. Typically, the first and second grooves 142 are of the same size and are used to propel spooled tubing strings 48, 50, of the same size and to the well 28. In the alternative, the grooves 142 may be of different size. Ideally, the wheel 114 includes additional grooves 144 of a size different than the grooves 142. This allows the spool tubing unit to run different size tubing strings into the well 28 without replacing the wheel 114."

Nowhere in paragraph [0042] is there teaching or suggestion of anything beyond what is shown in figure 11, i.e., four grooves, two (142) of a first diameter and two (142) of a second diameter. Consequently, there is no teaching or suggestion in Dearing et al. that would lead a person skilled in the art to the invention claimed in claims 19 and 20.

Furthermore, claim 19 is amended to include the limitations introduced into claims 1 and 9. It is therefore respectfully submitted that for reasons set forth above in detail with reference to claim 1, the teachings of Dallas in view of Dearing et al. would not lead a person of ordinary skill in the art to the invention claimed in claim 19. The rejection of claims 19 and 20 is thereby traversed.

In view of these amendments and for reasons set forth above in detail, this application is now considered to be in a condition for immediate allowance. Favourable reconsideration and early issuance of a Notice of Allowance are thereby requested.

Respectfully submitted,

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